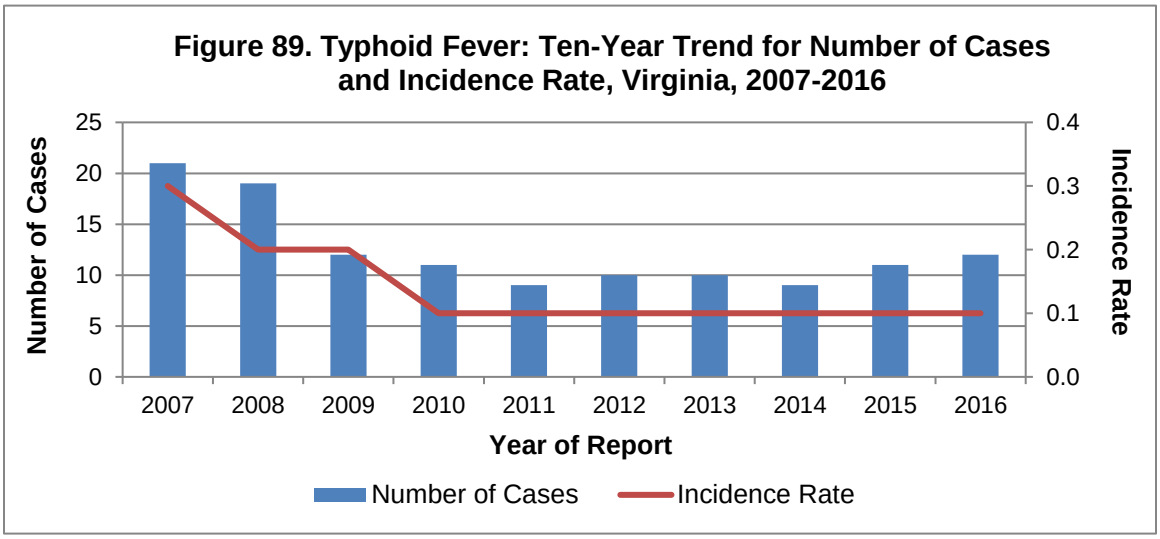
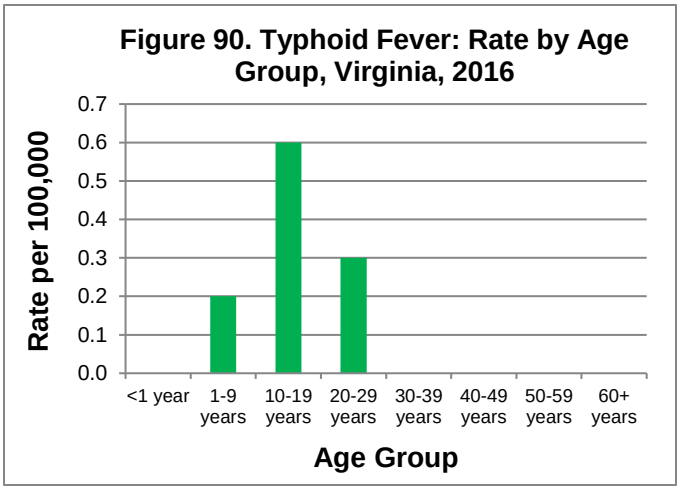
Typhoid Fever

Agent: *Salmonella* ser. Typhi (bacteria)
Mode of Transmission: Ingestion of food or water contaminated by feces or urine of infected persons. The bacteria live only in humans.
Signs/Symptoms: Include sustained fever, headache, malaise, altered mental status, lethargy, loss of appetite, fast heart rate, enlarged spleen, a non-productive cough and constipation.
Prevention: Access to safe water and proper sanitation, and following safe food handling and hand hygiene practices are essential. Travelers to countries where the disease is common should get vaccinated and avoid consuming risky foods and drinks.
Other Important Information: According to the CDC, most cases (up to 75%) of typhoid fever in the U.S. are acquired while traveling internationally. The condition is very common in the developing world, where it affects more than 20 million persons annually. Approximately 200,000 deaths are attributed to typhoid fever worldwide each year.

Typhoid Fever: 2016 Data Summary	
Number of Cases:	12
5-Year Average Number of Cases:	9.8
% Change from 5-Year Average:	+22%
Incidence Rate per 100,000:	0.1

During 2016, 12 cases of typhoid fever were reported in Virginia. This is a slight increase from the 11 cases reported in 2015, and represents a 22% increase from the five-year average of 9.8 cases per year (Figure 89). All 12 cases reported travel outside the U.S. in the 30 days prior to illness onset. Countries traveled to include India (7 persons), Pakistan (2 persons), Tanzania, Bangladesh, Turkey, Greece, and Nepal (1 person each). One person reported travel to more than one country.





Among all age groups, the highest number of cases and incidence rate were both seen in the 10-19 year age group (6 cases, 0.6 per 100,000) (Figure 90). Four cases occurred in the 20-29 year age group (0.3 per 100,000), while two cases occurred in the 1-9 year age group (0.2 per 100,000). No cases were reported from the remaining age groups. Race information was reported for all cases. The highest incidence rate was observed in persons in the "other" race population (1.5 cases per 100,000). One case each was reported from the white population and black population. Males and females had similar incidence rates (0.1 per 100,000, respectively). With eight cases being reported, incidence was highest in the northern region (0.3 per 100,000). The southwest, central, and eastern regions had similar rates (0.1 per 100,000, each). No cases were reported from the northwest region.

Onset of illness occurred in the first three quarters of the year with the highest percentage of cases reported during the third quarter (67%). However, because most cases are acquired outside the U.S., any seasonal pattern would most likely be related to travel patterns. During 2016, no deaths were attributed to typhoid fever in Virginia.